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DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

"METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE"

Case No. 09792909-5225, the specification of which

(check \_\_\_\_\_  
one) X is attached hereto  
was filed on October 19, 2001, as  
Application Serial No. 10/041,791  
and was amended on October 19, 2001  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent Office all information which is known to me to be material to the patentability of this application in accordance with Title 37, Code of Federal Regulations. 1.56<sup>1</sup>

I do not know and do not believe this invention was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and I believe that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as identified below:

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below:

Prior Foreign Application(s) Number	Country	Date
P2000-319402	Japan	October 19, 2000

and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the above listed application on which priority is claimed:

Prior Foreign Application(s) Number	Country	Date
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<sup>1</sup> (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a *prima facie* case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the application takes in:
  - (i) opposing an argument of unpatentability relied on by the Office, or
  - (ii) asserting an argument of patentability.

A *prima facie* case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden of proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

If no priority is claimed, I have identified all foreign patent applications filed prior to this application:  
**Prior Foreign Application(s)**

Number	Country	Date
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I hereby appoint the following attorneys, David W. Maher (Reg. 20,107), Kevin W. Guynn (No. 29,927), Jeffrey F. Craft (Reg. 30,044), David R. Metzger (Reg. 32,919), D. Andrew Floam (Reg. 34,597), Michael Kiklis (Reg. 38,939), Marc E. Hankin (Reg. 38,908), Jordan A. Sigale (Reg. 39,028), Michael A. Molano (Reg. 39,777), Michael T. Marrah (Reg. 40,718), Jean C. Edwards (Reg. 41,728), Raymond J. Ho (Reg. 41,838), Mark H. Krietzman (Reg. 41,128), Jennifer H. Hammond (Reg. 41,814), Vincent Tassinari (Reg. 42,179), Marina N. Saito (Reg. 42,121), John F. Nethery (Reg. 42,928), Alison P. Schwartz (Reg. 43,863), Eric N. Kohli (Reg. 43,726), Matthew M. Catlett (Reg. 44,067), John F. Griffith (Reg. 44,137), Gregory B. Gulliver (Reg. 44,138) Christopher P. Rauch (Reg. 45,034), Francisco A. Rubio-Campos (Reg. 45,358), Brian J. Gill (Reg. P46,727); Donald Carley (Reg. 47,471), Thomas J. Burton (Reg. 47,464) and Shashank Upadhye (Reg. 4,209), with full power of substitution and revocation, to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith and request that all correspondence and telephone calls in respect to this application be directed to

**SONNENSCHEIN NATH & ROSENTHAL**  
 P.O. Box 061080  
 Wacker Drive Station - Sears Tower  
 Chicago, Illinois 60606-1080  
 Telephone 312/876-8000  
 Facsimile 312/876-3974

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor TOMOYUKI HIRANO

Inventor's signature	<u>Tomojuki Hirano</u>	Date	<u>March 4, 2002</u>
Residence	<u>Kanagawa, Japan</u>		
Citizenship	<u>Japan</u>		
Post Office Address	<u>c/o Sony Corporation, 7-35, Kitashinagawa 6-chome</u>		
	<u>Shinagawa-ku, Tokyo 141, Japan</u>		

Full name of second inventor KAZUMI ASADA

Inventor's signature	<u>Kazumi Asada</u>	Date	<u>March 4, 2002</u>
Residence	<u>Kanagawa, Japan</u>		
Citizenship	<u>Japan</u>		
Post Office Address	<u>c/o Sony Corporation, 7-35, Kitashinagawa 6-chome</u>		
	<u>Shinagawa-ku, Tokyo 141, Japan</u>		

Full name of third inventor

Inventor's signature		Date	
Residence			
Citizenship			
Post Office Address			



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

MAY 20, 2002

PTAS

SONNENSCHEIN NATH & ROSENTHAL  
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CHICAGO, IL 60606-1080



\*102032375A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/18/2002

REEL/FRAME: 012709/0551  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
HIRANO, TOMOYUKI

DOC DATE: 03/04/2002

ASSIGNOR:  
ASADA, KAZUMI

DOC DATE: 03/04/2002

ASSIGNEE:  
SONY CORPORATION  
7-35, KITASHINAGAWA 6-CHOME  
SHINAGAWA-KU, TOKYO 141, JAPAN

SERIAL NUMBER: 10041791  
PATENT NUMBER:

FILING DATE: 10/19/2001  
ISSUE DATE:

LAZENA MARTIN, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

RECEIVED 5/26/02 DOCKET  
DOCKETED Assignment  
DIARIED 5/29/02  
BY: BVM

RECEIVED  
MAY 28 2002  
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FORM PTO-1695

1/31/92

03-27-2002

ET

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

To the Honorable Commissione  
thereof.

102032375

attached original documents or copy

## 1. Name of conveying party(ies):

TOMOYUKI HIRANO  
KAZUMI ASADA

3/18/02

Additional name(s) of conveying party(ies)  
attached? Yes  No

## 3. Nature of conveyance:

- Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_

Execution Date March 4, 2002

## 2. Name and address of receiving party(ies):

Name: Sony Corporation

Internal Address: \_\_\_\_\_

7-35, Kitashinagawa 6-chome

Shinagawa-ku, Tokyo 141, Japan

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Additional Name(s) & Address(es) attached  Yes  No

## 4. Application (number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

## A. Patent Application No.(s)

U.S. Serial No. 10/041,791 filed October 19, 2001  
Attorney Docket No. 09792909-5225

## B: Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

SONNENSCHEIN NATH & ROSENTHAL  
P.O. Box #061080  
Wacker Drive Station  
Sears Tower  
Chicago, IL 60606-1080  
Customer ID No. 26263

## 6. Total number of applications and patents involved

1

7. Total Fee (37 CFR 3.41) ..... 40.00 Enclosed Authorized to be charged to deposit account any Additional fees

## 8. Deposit Account Number:

19.3140

(Attach duplicate copy of this page if paying by deposit account)

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## 9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David R. Metzger

Name of Person Signing

Signature

March 8, 2002

Date

Total number of pages 3

Mail documents to be recorded and required cover sheet information to:

Commissioner of Patents and Trademarks  
Box Assignments  
Washington, D.C. 20231+

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OFFICE OF PUBLIC RECORDS  
FINANCE SECTION

**BEST AVAILABLE COPY****ASSIGNMENT**

WHEREAS, I, as a below named inventor, residing at the address stated next to my name, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in  
METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE

for which application for Letters Patent of the United States of America was executed by me on the date indicated next to my name and address;

AND WHEREAS, Sony Corporation, a Japanese corporation with offices at 7-35 Kitashinagawa 6-Chome, Shinagawa-Ku, Tokyo, Japan (hereinafter referenced as ASSIGNEE) is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

And I hereby authorize and request my attorney(s) of record in this application to insert the serial number and filing date of this application in the spaces that follow: Serial Number: 10/041,791 Filing Date: Oct. 19, 2001.

This assignment executed on the dates indicated below.

**TOMOYUKI HIRANO**

Name of first or sole inventor

Execution date of U.S. Patent Application

**KANAGAWA, JAPAN**

Residence of first or sole inventor

Tomojuki Hirano

Signature of first or sole inventor

March 4, 2002

Date of this assignment

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• KAZUMI ASADA

Name of second inventor \_\_\_\_\_ Execution date of U.S. Patent Application

KANAGAWA, JAPAN

Residence of second inventor \_\_\_\_\_

Kazumi Asada

Signature of second inventor \_\_\_\_\_

March 4, 2002

Date of this assignment

Name of third inventor \_\_\_\_\_ Execution date of U.S. Patent Application

Residence of third inventor \_\_\_\_\_

Signature of third inventor \_\_\_\_\_ Date of this assignment

Name of fourth inventor \_\_\_\_\_ Execution date of U.S. Patent Application

Residence of fourth inventor \_\_\_\_\_

Signature of fourth inventor \_\_\_\_\_ Date of this assignment

Name of fifth inventor \_\_\_\_\_ Execution date of U.S. Patent Application

Residence of fifth inventor \_\_\_\_\_

Signature of fifth inventor \_\_\_\_\_ Date of this assignment